

REMARKS

In the Office Action, claims 1-9 and 13-22 were rejected. By this Response, Applicants have not amended the claims. claims 1-9 and 13-22 remain pending in the present patent application. In view of the following remarks, Applicants respectfully request reconsideration and allowance of all pending claims.

First Rejection Under 35 U.S.C. § 103

In the Office Action, claims 1-5, 9, 13, 14, and 16-24 were rejected under 35 U.S.C. § 103(a) as obvious in view of the Haldeman reference (U.S. Patent No. 5,461,215; hereinafter "Haldeman") and the Moesta reference (U.S. Patent No. 1,548,204; hereinafter "Moesta"). In rejecting independent claims 1, 13, and 21, the Examiner stated as follows:

Haldeman shows a flexible fluid-cooled induction heating cable comprising: a litz wire 10 disposed within a hollow interior of the fluid-cooled induction heating cable 1; a first and a second electrical connector 2, each electrical connector being electrically coupled to the litz wire and a first and a second fluid connector 22 (see Figures 4-9 and col. 4, line 33 – col. 5, line 20). It differs in that the fluid connector is not separate from each electrical connector. Moesta shows that it is notoriously old and well known in the art of electric heating devices supplied with a flexible power cable 15 that includes a flexible conductor 11 connected to terminals 10 and 12 and fluid connectors 14 for cooling fluid to cool the conductors 11. The fluid T-connectors 14 are separate from the electrical terminals 10 and 12 (see Figures 1-3 and page 1, line 90 – page 2, line 44). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Haldeman to use fluid connectors separate from the electrical connectors for a safer device, in view of the teaching of Moesta. In regard to claims 5 and 9, pipes 17 and 20 are claimed jumper hose.

Applicants, however, respectfully assert that the foregoing rejection does not establish a *prima facie* case of obviousness, as is required by Section 103. The Examiner bears the burden of establishing a *prima facie* case of obviousness. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (PTO Bd. App. 1979). To establish a *prima facie* case, the Examiner must not only show that the combination or modification includes *all* of the claimed elements, but also a convincing line of reasoning as to why one of ordinary skill in the art would have found the claimed invention to have been obvious in light of the teachings of the references. *See Ex parte Clapp*, 227 U.S.P.Q. 972 (B.P.A.I. 1985). Moreover, obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention absent some teaching or suggestion supporting the combination or modification. *See ACS Hospital Systems, Inc. v. Montefiore Hospital*, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984). Indeed, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *See In re Mills*, 16 U.S.P.Q.2d. 1430 (Fed. Cir. 1990).

The Federal Circuit has consistently held that a reference that teaches away from the claimed invention cannot serve to create a *prima facie* case of obviousness. *See In re Gurley*, 31 U.S.P.Q.2d 1130, 1132 (Fed. Cir. 1994) (noting that it is a useful general rule that “a reference that ‘teaches away’ can not [*sic*] serve to create a *prima facie* case of obviousness”). Moreover, a reference must be considered in its entirety, including portions that would lead away from the claimed invention. *See* M.P.E.P. § 2142.02. Indeed, “[i]t is impermissible within the framework of section 103 to pick and choose from any one reference only so much of it that will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art.” *In re Wesslau*, 147 U.S.P.Q. 391, 393 (C.C.P.A. 1965).

Additionally, Applicants respectfully submit the Examiner must provide objective evidence, rather than subjective belief and unknown authority, of the requisite motivation or suggestion to combine or modify the cited references. *See In re Lee*, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002). Moreover, when prior art references require a selected combination or modification to render obvious a subsequent invention, there must be some reason for the combination or modification other than the hindsight gained from the invention itself, i.e., something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the combination or modification. *See Uniroyal Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 U.S.P.Q.2d 1434 (Fed. Cir. 1988). Indeed, the Federal Circuit has warned that the Examiner must not “fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher.” *See In re Dembiczak* 50 U.S.P.Q. 2d 52 (Fed. Cir.1999). (quoting *W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 220 U.S.P.Q. 303, 313 (Fed. Cir.1983)). Moreover, avoiding hindsight reconstruction is especially important regarding less technologically complex inventions, where the very ease which the invention can be understood may prompt one employ such hindsight. *See id.*

In determining the differences between the prior art and the claims, the question under Section 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. *See Stratoflex, Inc. v. Aeroquip Corp.*, 218 U.S.P.Q. 871 (Fed. Cir. 1983). Thus, the Examiner must not look at each element of a claim individually, but rather the claims should be viewed as a tapestry comprising the recited elements. “It is impermissible, however, to simply engage in a hindsight reconstruction of the claimed invention, using the applicant’s structure as a template and selecting elements from references to fill the gaps.” *In re Gorman*, 18 U.S.P.Q. 2d 1885, 1888 (Fed. Cir. 1991) (emphasis added). Simply put, what may seem logical to combine in retrospect and after viewing an applicant’s invention is not obvious unless the cited references, without benefit of this hindsight, teach what is claimed. *See*

In re Zurko, 42 U.S.P.Q.2d 1476, 1479 (stating “[w]hile in retrospect, looking at applicants’ invention, it might seem logical to perform a repeat-back in the UNIX system over a trusted line, neither UNIX nor FILER2 teaches communications with the user of a trusted pathway,” as is recited in the claim in question).

With this precedent in mind, Applicants respectfully assert that the cited references, taken alone or in combination, do not render obvious the pending claims, because Haldeman teaches away from the claimed subject matter and because a threshold, subjective reason for combining the cited references for a *prima facie* case of obviousness has not been articulated, evidencing the use of impermissible hindsight reconstruction.

Haldeman Teaches Away from the Claimed Subject Matter

In contrast to the claimed subject matter of independent claims 1, 13, and 21, Haldeman teaches a device in which the electrical connector 22 and a fluid coupler 6 must be coaxial with respect to one another. Haldeman states that “[t]he present invention is also directed to a combined coolant and electrical connector for providing an electrical connection and coolant to an inductive heating coil.” Haldeman, col. 1, ll. 41-45 (emphasis added). To effectuate this combined coolant and electrical connector, Haldeman teaches a terminal connection of adapter 2 that is configured to receive both a coolant source and a current source. *See* Haldeman, col. 4, ll. 47-49. Indeed, as best illustrated in FIG. 9 of Haldeman, the receiving connector for current and the receiving connector for cooling fluid are coaxial with respect to one another. By placing the fluid and current connections coaxial with respect to one another, Haldeman effectuates cooling of this adapter 12, and cooling is of “paramount importance” to Haldeman. Indeed, Haldeman states that “[t]erminal connections to the coil are of paramount importance because they represent a high resistance point where the very large surface area of the litz cable 10 is reduced down where it is attached to the standard half inch cooper tube fitting.” *See* Haldeman, col. 4, ll. 33-39. Thus, in Haldeman, the terminal

connections are taught as requiring cooling, to mitigate the heating effect of the high resistance point of the terminal connections, in turn requiring a coaxial arrangement that routes coolant adjacent to the current path. Accordingly, Applicants respectfully submit that Haldeman teaches away from the claimed subject matter and, as such, cannot support a *prima facie* case of obviousness with respect to the pending claims.

Impermissible Hindsight Reconstruction

Additionally, Applicants respectfully assert that the articulated motivation for the presented combination in the present rejection does not support a *prima facie* case of obviousness and, furthermore, evidences the use of impermissible hindsight reconstruction in rejecting the present claims. As quoted above, the articulated motivation for combining the cited references presented in the office action is as follows: “It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Haldeman to use fluid connectors separate from the electrical connectors for a safer device, in view of the teaching of Moesta.” *See* Office Action mailed April 19, 2005, p.3. Indeed, this subjectively determined belief that combining Haldeman with Moesta would produce a “safer” device is the only line of reasoning presented for combining these two references. However, Applicants respectfully submit that neither Haldeman nor Moesta suggest that safety is a concern. Indeed, neither Moesta nor Haldeman even suggests that the coaxial arrangement of Hadlemen is less safe than the arrangement described in Moesta. Rather, Applicants respectfully assert that the allegedly “safer” device is based on, at best, a picking and choosing of elements from disparate references and using Applicants’ own teachings as a motivation to combine these various elements. Respectfully, Applicants submit that such a rejection, as is presented, is an improper use of hindsight reconstruction and, as such, does not support a *prima facie* case of obviousness.

Conclusion

Based on the foregoing, Applicants respectfully assert that the Examiner has not satisfied his threshold burdens of establishing a prima facie case of obviousness, as is required for a valid obviousness rejection. Thus, Applicants respectfully submit that claims 1-5, 9, 13, 14, and 16-24 are patentable and in condition for allowance.

Reconsideration and allowance are respectfully requested.

Second Rejection Under 35 U.S.C. § 103

In the Office Action, dependent claims 6 and 15 were rejected under 35 U.S.C. § 103(a) as obvious in view of Haldeman and Moesta, as applied to claims 1-5, 9, 13, 14, and 16-24, and in further view of the Emerson et al. reference (U.S. Patent No. 3,674,971; hereinafter "Emerson"). Applicants, however, respectfully assert that dependent claims 6 and 15 are patentable over this three reference rejection for at least the reason that Emerson does not obviate the deficiencies of Haldeman and Moesta, which are discussed above in regard to independent claims 1 and 13-the claims from which dependent claims 6 and 15 depend. Thus, Applicants respectfully assert that dependent claims 6 and 15 are patentable over the Haldeman-Moesta-Emerson reference combination by virtue of their respective dependencies on allowable base claims and also by virtue of the additional feature recited therein. In view of the foregoing, Applicants respectfully request reconsideration and allowance of dependent claims 5 and 16.

Third Rejection Under 35 U.S.C. § 103

In the Office Action, claims 7 and 8 were rejected under 35 U.S.C. § 103(a) as obvious in view of a four reference combination: Haldeman, Moesta, Emerson, and the Strickland, Jr. reference (U.S. Patent No. 2,457,843; hereinafter "Strickland, Jr."). Applicants, however, respectfully traverse this rejection. Firstly, Applicants note that the use of four disparate references to reach the instant claims undeniably evidences a use of hindsight reconstruction. Secondly, Applicants note the addition of Strickland, Jr. as well


as Emerson does not obviate the deficiencies of the Haldeman-Moesta reference combination discussed above. In other words, Applicants respectfully submit that Hadlemen and Moesta cannot be combined to reach a *prima facie* case of obviousness, and the addition of Strickland, Jr. and Emerson does not obviate this deficiency. Therefore, Applicants respectfully assert that independent claim 7 and its respective dependent claim 8 are patentable over the cited references, whether taken alone or together. In view of the foregoing, Applicants respectfully request reconsideration and allowance of claim 7 and 8.

Conclusion

In view of the remarks and amendments set forth above, Applicants respectfully request allowance of the pending claims. If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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